

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT APPLICATION

5 Entitled : A TILTABLY RETRACTABLE THRUSTER

Inventors :

Assignee :

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## ABSTRACT OF THE DISCLOSURE

15 The present invention relates to a retractable thruster for a surface or submersible vessel, the thruster comprising a propulsion assembly comprising a rigid structure secured to a cylindrical turbine, said rigid structure containing or being suitable for  
20 containing a motor, said motor being suitable for rotating at least one propeller inside said turbine via at least one rotary shaft between said motor and said propeller, and preferably further comprising a plate for closing the hull placed beneath said turbine and secured  
25 thereto, said propulsion assembly being displaceable by displacement means between a retracted position in which it is at rest inside the hull and a deployed position for providing propulsion in which the propeller is immersed beneath the hull. According to the present invention,  
30 said displacement means enable said propulsion assembly to be moved between said retracted and deployed positions by said propulsion assembly performing uniform circular movement about an axis of rotation situated substantially at the level of said hull or beneath said hull.

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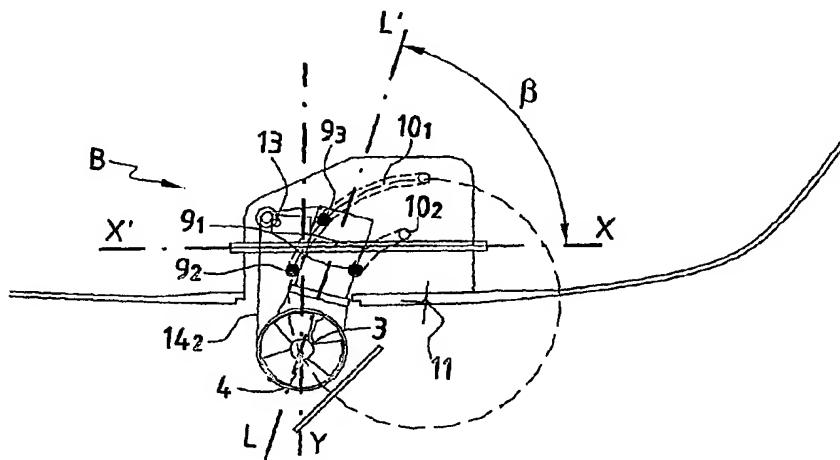
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(54) Title: ROTATIONALLY RETRACTABLE PROPELLER

(54) Titre : Propulseur retractable par rotation



(57) Abstract: The invention relates to a retractable propeller for a floating device or submersible device comprising a propeller unit (1) consisting of a rigid structure (2,21) which is coupled to a cylindrical turbine (4), whereby said rigid structure (2,21) contains or can contain a motor, said motor rotationally driving at least one helix (3) inside the turbine (4) with the aid of at least one shaft which rotates between the motor and the helix, and preferably a hull(7) obtrusion plate (6) placed below said turbine and coupled thereto. The propeller unit (1) can be displaced with the aid of displacement means (91-93,101-102) between a retracted rest position (1) inside the hull and a spread-out propulsion position (B) wherein the helix (3) is submerged below the hull (7). According to the invention, said displacement means enable the propeller unit to be displaced between the retracted position (A) and the spread-out position (B) according to a uniform circular movement of said propeller unit (1) in relation to a centre of rotation (11) located essentially at the level of the hull or below said hull.

*[Suite sur la page suivante]*

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